AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1-13. (Cancelled)

14. (Currently Amended) An amplifier circuit, comprising:

at least one transconductor device connected to at least one phase shifter section with an adjustable phase shift and an impedance at least partially dependent on the frequency of an input signal, wherein in use said adjustable phase shift is adjusted to have substantially the opposite value of a phase shift of said transconductor device, wherein said phase shifter section comprises at least one capacitor device and at least one adjustable resistor device, said adjustable resistor device comprises an amplifier device including:

at least one input contact for receiving a resistance control signal;

a first output contact connected to the at least one ~~of said~~ capacitor ~~devices~~ device; and

a second output contact connected to said transconductor device; and,

wherein said amplifier circuit further comprises a control device for providing said resistance control signal to said input contact.

15. (Currently Amended) The amplifier circuit as recited in claim 14, wherein the component characteristics of said amplifier device in the adjustable resistor device [[is]] are substantially equivalent to the component characteristics of said transconductor device.

16. (Currently Amended) The amplifier circuit as recited in claim 14, wherein said transconductor device [[is a]] is comprised of at least one transistor.

17. (Previously Presented) The amplifier circuit as recited in claim 14, wherein said amplifier device in the adjustable resistor device is a transistor.

18. (Currently Amended) The amplifier circuit as recited in claim 16, wherein the at least one ~~of said~~ transistor ~~devices~~ device is a Metal Oxide Semiconductor Field Effect Transistor.

19. (Previously Presented) The amplifier circuit as recited in claim 14, wherein said control device comprises a voltage controlled oscillator.

20. (Previously Presented) The amplifier circuit as recited in claim 19, wherein the control device further comprises an amplifier.

21. (Previously Presented) The amplifier circuit as recited in claim 20, wherein the voltage controlled oscillator circuit comprises at least two oscillator transconductor devices substantially similar to said transconductor device.

22. (Currently Amended) ~~A gyrator circuit including at least one amplifier circuit as recited in claim 14, further~~ An amplifier circuit, comprising:

at least one transconductor device connected to at least one phase shifter section with an adjustable phase shift and an impedance at least partially dependent on the frequency of an input signal, wherein in use said adjustable phase shift is adjusted to have substantially the opposite value of a phase shift of said transconductor device;

[[A]] at least one gyrator circuit ~~including at least one amplifier circuit as recited in claim 14, further comprising:~~ having at least one amplifier device therein and having an input contact connected to an output contact of the transconductor device [[in]] of said amplifier circuit, wherein said at least one amplifier device has a gain substantially the inverse of the gain of the amplifier device in said amplifier circuit.

23. (Previously Presented) The amplifier circuit of claim 22, further comprising:

[[A]] a filter device comprising at least one in-phase input and at least one in-phase output, [[and]] the at least one gyrator circuit ~~as recited in claim 22 connected~~ coupled to said in-phase input and said in-phase output.

24. (Currently Amended) The filter device as recited in claim 23, further comprising:

at least one phase shifted input[[;]] coupled to the

at least one gyrator device ~~as recited in claim 9 connected to said phase shifted input; and~~, and

the at least one phase shifted output ~~connected~~ coupled to the at least one said gyrator device.

25. (Currently Amended) The ~~filter device~~ amplifier circuit as recited in claim [[24]] 22, further comprising:

a filter device comprising at least one in-phase input, at least one in-phase output, at least one phase shifted input, and at least one phase shifted output;

at least a first gyrator device connected to said in-phase input and said phase shifted input; and

at least a second gyrator device connected to said in-phase output and said phase shifted output.

26. (Currently Amended) A method for amplifying an input signal, comprising the steps of:

generating a ~~signal~~ current signal based on a voltage of an input signal;

adjusting a phase shift of a resistor device to substantially the opposite of a phase shift of said ~~signal~~ current signal generated in said generating step, said resistor device having an adjustable phase shift and an impedance at least partially dependent on the frequency of [[an]] the input signal;

presenting the ~~signal~~ current signal to a capacitor device; and

presenting the current signal to said resistor device.